THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 25

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

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Ex parte AARON Y. COHEN

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Appeal No. 1997-2899
Application No. 08/385,574

_____

ON BRIEF

_____

Before HAIRSTON, FLEMING, and BARRY, ***Administrative Patent Judges***.

FLEMING, ***Administrative Patent Judge***.

DECISION ON APPEAL

This is a decision on appeal from the final rejection of claims 24 through 46. Claims 1-23 have been canceled.

Appellant's invention relates generally to digital communication networks and, more specifically, to switching devices coupled to a pair of redundant networks for switching

to an alternate network without losing data in the event of a network failure. As disclosed on pages 16 through 18 of the specification, terminals 310 and 320 communicate with each other through two independent networks 301 and 302 which provide redundant communication paths for identical copies of the signal transmitted simultaneously between the terminals. Appellant on pages 19 and 20 discloses that a failure in any of the networks causes a fault signal to be sent to both terminals so that the receiving terminal can select the information received from the alternate network.

Representative independent claim 24 is reproduced as follows:

> 24. A first terminal for exchanging information with a second terminal over a first communications link and a second communications link wherein the communications links are configured in parallel between the first and second terminals and are operable to transmit the information, and wherein the first communications link is operable to transmit a fault indication signal upon detection of a fault condition affecting the first communications link, the first terminal comprising:
>
> a transmitting means for simultaneously transmitting duplicate information to the second terminal over the first communication link and the second communication link; and
>
> a receiving means for receiving duplicate information from the second terminal over the

> first communication link and the second communication link, for monitoring the information from the first communications link to detect the fault indication signal, and for replacing the information from the first communications link with corresponding information from the second communications link upon detection of the fault indication signal.

The Examiner relies on the following reference:

Yamada	5,343,477	Aug. 30, 1994

Claims 24 through 46 stand rejected under 35 U.S.C. § 103 as being obvious over Yamada.

Rather than repeat the arguments of Appellant and the Examiner, we make reference to the briefs[1] and the answer for the details thereof.

OPINION

After careful review of the evidence before us, we do not sustain the rejection of claims 24 through 46 under 35 U.S.C. § 103.

The Examiner has failed to set forth a ***prima facie*** case. It is the burden of the Examiner to establish why one having ordinary skill in the art would have been led to the claimed

[1] Appellant filed an appeal brief on September 12, 1996. Appellant also filed a reply brief on January 2, 1997 which was acknowledged in the communication mailed January 29, 1997 and entered by the Examiner.

invention by the express teachings or suggestions found in the prior art, or by implications contained in such teachings or suggestions. ***In re Sernaker***, 702 F.2d 989, 995, 217 USPQ 1, 6 (Fed. Cir. 1983). "Additionally, when determining obviousness, the claimed invention should be considered as a whole; there is no legally recognizable 'heart' of the invention." ***Para-Ordnance Mfg. v. SGS Importers Int'l, Inc***., 73 F.3d 1085, 1087, 37 USPQ2d 1237, 1239 (Fed. Cir. 1995), ***cert. denied***, 519 U.S. 822 (1996) ***(citing W.L. Gore & Assoc., Inc. v. Garlock, Inc.***, 721 F.2d 1540, 1548, 220 USPQ 303, 309 (Fed. Cir. 1983), ***cert. denied***, 469 U.S. 851 (1984)).

Appellant on page 5 of the appeal brief argues that Yamada does not teach Appellant's simultaneous transmission of duplicate information over different communication links as defined in independent claim 24. Appellant further points out that Yamada's redundant databases and connections provide access to a second database only after it has failed to access its normal database rather than simultaneous transmission of duplicate data. Appellant concludes that a mere possibility of a modification made to the basic elements in Yamada's structure does not support a ***prima facie*** case of obviousness.

In response to Appellant's arguments, the Examiner on page 3 of the answer states that Yamada teaches first and second storage devices for storing duplicate information. The Examiner further refers to Yamada, col. 2, lines 23 through 30, which shows first and second transmission lines connected to both storage devices. The Examiner points out that duplicate information could be transmitted over the two lines where the status of a selection flag would determine whether duplicate information be simultaneously transmitted or particular information be sent one at a time.

As pointed out by our reviewing court, we must first determine the scope of the claim. "[T]he name of the game is the claim." ***In re Hiniker Co.***, 150 F.3d 1362, 1369, 47 USPQ2d 1523, 1529 (Fed. Cir. 1998). Claims will be given their broadest reasonable interpretation consistent with the specification, and limitations appearing in the specification are not to be read into the claims. ***In re Etter***, 756 F.2d 852, 858, 225 USPQ 1, 5 (Fed. Cir. 1985).

We note that Appellant's claim 24 recites

> ... a transmitting means ***for simultaneously transmitting duplicate information to the second terminal*** over the

> first communication link and the second communication link; and
>
> a receiving means ***for receiving duplicate information from the second terminal*** over the first communication link and the second communication link,
>
> ... and for replacing the information from the first communications link with corresponding information from the second communications link upon detection of the fault indication signal [emphasis added].

We find that Appellant's claim 24 includes a transmitting means and a receiving means for simultaneously transmitting and receiving duplicate information over two communication links. Additionally, claim 24 requires that the receiving means monitor the incoming information on both links for a fault indication signal which is sent anytime a failure in the communication link occurs. The received information from the link having a fault signal is replaced by the information from the other link.

Claim 24 clearly requires all transmissions and receipts of information to be duplicate and simultaneous over redundant links. This is further supported by Appellant's disclosure on pages 18 and 19 of the specification and Figure 3 which shows that terminals 310 and 320 transmit and receive two identical copies of the information over identical networks 301 and 302.

A failure of link 112 in network 301 causes an error code to be transmitted to the receiving terminal. Upon detecting an error code, the receiving terminal uses the error-free information transmitted and received over the other network 302. Thus, Appellant's claim 24 clearly requires that duplicate information be simultaneously transmitted over different and redundant communication links.

The Federal Circuit states that "[t]he mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification." ***In re Fritch***, 972 F.2d 1260, 1266 n.14, 23 USPQ2d 1780, 1783-84 n.14 (Fed. Cir. 1992)(***citing In re Gordon***, 733 F.2d 900, 902, 221 USPQ 1125, 1127 (Fed. Cir. 1984)). It is further established that "[s]uch a suggestion may come from the nature of the problem to be solved, leading inventors to look to references relating to possible solutions to that problem." ***Pro-Mold & Tool Co. v. Great Lakes Plastics, Inc***., 75 F.3d 1568, 1573, 37 USPQ2d 1626, 1630 (Fed. Cir. 1996), ***(citing In re Rinehart***, 531 F.2d 1048, 1054, 189 USPQ 143, 149 (CCPA 1976)) (considering the problem to be solved in a

determination of obviousness). The Federal Circuit reasons in ***Para-Ordnance Mfg. Inc. v. SGS Importers Int'l Inc.***, 73 F.3d 1085, 1088-89, 37 USPQ2d 1237, 1239-40 (Fed. Cir. 1995), ***cert. denied***, 519 U.S. 822 (1996), that for the determination of obviousness, the court must answer whether one of ordinary skill in the art who sets out to solve the problem and who had before him in his workshop the prior art, would have been reasonably expected to use the solution that is claimed by the Appellants.

Yamada teaches a data processing system where a plurality of terminals are connected to first and second storage via first and second transmission lines. Yamada in col. 2, lines 31 through 52, specifically discloses that a transmission control between the first terminal and the first storage detects failures in transmission over the first transmission line and switches the first terminal to the second storage via the second transmission line. Additionally, Yamada in col. 4, lines 53 through 63, and Figures 1 and 6 discloses that if the first transmission line between terminal 2 and first storage 6 fails a selection flag F1 is set which shifts the transmission to the second line. Once the second transmission line is

selected, the communication between terminal 2 and second storage 7 is via the second transmission line. Yamada further teaches that identical data is copied to storage devices so that any terminal can access the same information independent of the selected storage and the corresponding line.

We disagree with the Examiner that duplicate information could be transmitted simultaneously over the first and the second transmission lines of Yamada's data processing system as recited in Appellant's claim 24. Yamada is concerned with duplicate information contained in two storage devices where each operates as a backup for the other rather than sending duplicate information to the same terminal. More specifically, Yamada in col. 2, lines 63 through 68, discloses that the terminals are grouped into those using the first storage and others using the second storage during normal transmission. However, in col. 3, lines 6 through 12, Yamada further adds that identical data is stored in both storage devices which provide same information to each terminal. Therefore, Yamada's system does not simultaneously connect each terminal to both storage devices,

rather a selection flag allows the terminal to communicate only with one of the storage devices.

We fail to find any suggestion or teaching to modify Yamada's data storage device such that duplicate information is simultaneously sent over first and second links as recited in Appellant's claim 24. Yamada's data storage system, depending on the setting of the selection flag, communicates with one or the other storage device over its corresponding communication line. Therefore, the use of a selection flag that activates only one of the transmission links for any particular terminal does not suggest to one of ordinary skill in the art to simultaneously transmit duplicate information over first and second communication links. We note that the other independent claims 29 and 37 similarly recite simultaneously transmitting duplicate information over different and redundant communication links. Accordingly, we reverse the rejection of claims 24 through 46 under 35 U.S.C. § 103 over Yamada.

CONCLUSION

In view of the foregoing, the decision of the Examiner rejecting claims 1 through 10, and 12 through 20 under 35 U.S.C. § 103 is reversed.

37 CFR § 1.196(b)

Under the provisions of 37 CFR § 1.196(b), we make the following new ground of rejection. Claims 29 and 37 are rejected under 35 U.S.C. § 102(b) as being anticipated by Hochstein (of record).

With respect to claim 29, Hochstein in Figure 2 and col. 2, line 63 through col. 3, line 60, discloses a communication system with active and spare communication links 12 for transmitting information and signals where the first terminal 11 is coupled to both links and includes a redundant sender means 28 for duplicating information and simultaneously transmitting identical information to both links. Hochstein, in col. 5, line 64 through col. 6, line 21, further discloses fault detector 44 on the active link for detecting a failure on the active link and transmitting a fault signal corresponding to that link. Additionally, Hochstein teaches a second terminal 13 coupled to active and spare links 12 for receiving the duplicate information from both links in

redundant combining means 50 which detects the fault indication signal from the active link and replaces the signal received from the active link with the fault-free signal received from the spare link.

With respect to claim 37, Hochstein in Figure 2 and col. 2, line 63 through col. 3, line 60, discloses a method for transmitting information from first terminal 11 to second terminal 13 over two parallel communication links 12 wherein the first link is operable to transmit a fault indication signal through fault detector 44. The first terminal simultaneously transmits duplicate information through sender means 28 over both links. Hochstein further discloses in col. 5, line 64 through col. 6, line 21, fault detector 44 for detecting failure on the first link and transmitting a fault signal corresponding to that link. Additionally, Hochstein teaches receiving the information from both links, monitoring the information received from the first link in a second terminal 13, and replacing the information from the first link with that received from the second link by redundant combining means 50.

This decision contains a new ground of rejection pursuant to 37 CFR § 1.196(b) (amended effective Dec. 1, 1997, by final rule notice, 62 Fed. Reg. 53,131, 53,197 (Oct. 10, 1997), 1203 Off. Gaz. Pat. & Trademark Office 63, 122 (Oct. 21, 1997)). 37 CFR § 1.196(b) provides, "[a] new ground of rejection shall not be considered final for purposes of judicial review."

37 CFR § 1.196(b) also provides that the appellant, ***WITHIN_TWO MONTHS FROM THE DATE OF THE DECISION***, must exercise one of the following two options with respect to the new ground of rejection to avoid termination of proceedings (37 CFR § 1.197(c) as to the rejected claims:

> (1) Submit an appropriate amendment of the claims so rejected or a showing of facts relating to the claims so rejected, or both, and have the matter reconsidered by the examiner, in which event the application will be remanded to the examiner . . . .
>
> (2) Request that the application be reheard under § 1.197(b) by the Board of Patent Appeals and Interferences upon the same record . . . .

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

REVERSED 37 CFR § 1.196(b)

KENNETH W. HAIRSTON Administrative Patent Judge	)	
MICHAEL R. FLEMING Administrative Patent Judge	)	BOARD OF PATENT APPEALS AND INTERFERENCES
LANCE LEONARD BARRY Administrative Patent Judge	)	

MRF/sld
(mds)

Appeal No. 1997-2899
Application No. 08/385,574

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